Exploring Earthquakes with Finn the Dolphin

Learning objective: To understand the physical processes of an earthquake and the terminology used to describe them.

Follow Finn the Dolphin’s guide to create a cross-section diagram of an earthquake. Use your drawing to show how the movement beneath the Earth's surface affects the land above.

Draw: Create a clear, scientific cross-section diagram. Style: Educational textbook illustration. Include: A cross-section of the ground showing two tectonic plates meeting at a fault line. Show the 'Focus' deep underground and the 'Epicentre' directly above it on the surface. Add simple wavy lines to represent the seismic energy traveling through the crust. Ensure there is space for neat, clear labels.

Label words: Epicentre · Focus · Seismic Waves · Fault Line · Crust · Tectonic Plates

Steps:

1. Step 1: Draw two large, jagged blocks of rock (tectonic plates) side-by-side. Draw a thick line between them to represent the fault line. Label the fault line.
2. Step 2: Mark a small 'X' deep underground where the earthquake begins. Label this the 'Focus'.
3. Step 3: Draw circles radiating outwards from the 'Focus' to show the energy spreading. Label these 'Seismic Waves'.

4. Step 4: Draw a point directly above the 'Focus' on the Earth's surface. Label this the 'Epicentre'.

5. Explain in your own words why the 'Epicentre' is usually where the most damage occurs during an earthquake.